

## REMARKS

Claims 1-23 were pending in the application.

Claims 1-23 have been rejected.

Claims 1-5, 7, 10-15, 17, and 21 have been amended, as indicated above.

Claims 8, 9, 22 and 23 have been cancelled without prejudice.

No new matter has been added.

Reconsideration of the Claims is respectfully requested.

### **1. Rejection under 35 U.S.C. 103(a)**

*Claims 1, 7-9, 15 and 21-23 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0067704, to Ton ("Ton") in view of Perkins, IP MOBILITY SUPPORT (October 1996) ("Perkins I").*

*Claims 2, 3, 10, 11, 16 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ton in view of Perkins as applied to Claims 1 and 15 above, and further in view of U.S. Patent Application Publication No. 2002/0078238, to Troxel ("Troxel").*

*Claims 4 and 12 were rejected under 35 USC 103(a) as being unpatentable over Ton in view of Perkins and further in view of Troxel as applied to Claims 2 and 10 above, and further in view of Jue et al. ("Design & Analysis of Replicated Server Architecture for Supporting IP-Host Mobility") ("Jue"), and even further in view of Tiedmann et al., U.S. Patent No. 6,615,050 ("Tiedmann").*

*Claims 5-6 and 13-14 were rejected under 35 USC 103(a) as being unpatentable over Ton in view of Perkins and further in view of Troxel as applied to Claims 2 and 10 above, and further in view of Perkins, "MOBILE NETWORKING THROUGH MOBILE IP (1998) ("Perkins II") and U.S. Patent No. 5,590,092, to Fehnel ("Fehnel").*

*Claim 18 was rejected under 35 USC 103(a) as being unpatentable over Ton in view of Perkins I and further in view of Troxel as applied to claim 17 above, and further in view of Jue.*

*Claims 19 and 20 were rejected under 35 USC 103(a) as being unpatentable over Ton in view of Perkins I and further in view of Troxel as applied to Claim 17 above, and further in view of Perkins II.*

**A. Applicant respectfully submits that a *prima facie* showing of obviousness has not been made with respect to Applicant's amended claims**

The Office Action submits that "Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection necessitated by the amended language and/or new limitations. In response to applicant's arguments, the Examiner respectfully disagrees as the applied reference(s) provide more than adequate support and to further clarify (see the above claims for relevant citations)." (Office Action at page 26).

Applicant respectfully submits that the cited rejections generally mirror those of the Final Office Action having a mailed date of June 5, 2006 without consideration of the amended language of the claims; also, the rejections now recite the "same field of endeavor" language to look back upon the claims that had been presented.

Applicant's Independent Claims 1 and 15 were rejected under the hypothetical combination of Ton in view of Perkins I. Applicant's Independent Claim 10 was rejected under the hypothetical combination of Ton in view of Perkins I, and further in view of Troxel.

Applicant respectfully submits that the elements for a rejection based upon a "same field of endeavor" is not provided. Generally, the clause is used summarily, such as "In the same field of endeavor, [the reference] clearly discloses . . . ." (*see, e.g.,* Office Action at pages 5, 9, 11).

The test requires that "Office personnel must resolve the Graham factual inquiries. Then, Office personnel must articulate the following: (1)a finding that the scope and content of the prior art, whether in the same field of endeavor as that of the applicant's invention or a different field of endeavor, included a similar or analogous device (method, or product); (2)a finding that there were design incentives or market forces which would have prompted adaptation of the known device (method, or product); (3)a finding that the differences between the claimed invention and the prior art were encompassed in known variations or in a principle known in the prior art; (4)a finding that one of ordinary skill in the art, in view of the identified design incentives or other market forces, could have implemented the claimed variation of the prior art, and the claimed variation would have been predictable to one of ordinary skill in the art; and (5)whatever additional findings based on the Graham factual inquiries may be necessary, in view

of the facts of the case under consideration, to explain a conclusion of obviousness.” MPEP 2143 at page 2100-136 (Rev. 6, Sept. 2007).

The rationale to support a conclusion that the claimed invention would have been obvious is that design incentives or other market forces could have prompted one of ordinary skill in the art to vary the prior art in a predictable manner to result in the claimed invention. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art.

As submitted, the cited references do not recite storing of addresses for a plurality of home agents that include a primary home agent and a plurality of secondary agents.

The Office Action submits that “Perkins clearly discloses having the feature wherein the plurality of addresses for the home agents stored in the subscriber unit is programmed by a service provider prior to delivering the subscriber unit to its subscriber (see pgs. 34-35, section 3.6), where a mobile node is configured with IP addresses.” (Office Action at page 5).

The referenced language of Perkins refers to an address, not a plurality of addresses for a primary home agent and a plurality of secondary home agents. The Internet standards track protocol of Perkins recites that a “mobile node MUST be configured with its home address, a netmask, and a mobility security association for each home agent. In addition, a mobile node MAY be configured with *the IP address* of one or more of its home agents; otherwise, the mobile node MAY *discover* a home agent using the procedures described in Section 3.6.1.2.” (Perkins § 3.6 (“mobile node considerations”).

The cited text of Perkins does not refer to “failed registration attempts” because if a home agent is unknown to the IP mobile device, it engages in a “discovery” mode, in which, through the registration procedure, a “mobile node is [enabled] to: . . . discover the address of a home agent if the mobile node is not configured with this information.” (Perkins § 3 at page 24 (“Registration”)).

Applicant respectfully submits that Perkins does not apply to the context of a subscriber unit that operates in a cellular system.

**B. Applicant's subscriber unit relates to operation within a cellular system and avoiding network preclusion upon failure to register with a home agent**

For background, Applicant's specification notes that "[b]ecause each subscriber unit has a corresponding home agent, during initial registration operations, the subscriber unit must register with its assigned home agent. . . . However, because the IP address of its assigned home agent is hard-coded in its memory, if the assigned home agent is not operational (not an uncommon event) when the subscriber unit attempts registration, a failure in registration results [in which] the subscriber unit is [precluded] from receiving IP communication service from its cellular system provider." (Specification at page 2, *ll.* 13-27, through page 3, *ll.* 1-2).

The cited references do not teach or suggest initial programming or storage of a plurality of home agents in a subscriber unit prior to an initial registration attempt. Instead, the cited references teach reliance upon a home agent registration in a cellular system before being capable of receiving alternate home agent addresses.

For example, Ton recites "attached to the network," but does not recite failed attachment. Ton recites a "network [that] will have a number of Mobile Nodes attached to the network. Each Mobile Node will have an IP address and be attached to the network through a Home Agent. When visiting another network a Mobile Node will register with that network through a Foreign Agent. The network will provide a number of Home Agents through which the Mobile Node may register, although the Mobile Node will be statically configured to register with a given Home Agent." (Ton ¶ 0023).

To avoid Home Agent failure following mobile node registration, Ton calls for "an additional Mobile IP extension [that] is added to the registration reply message[that allows] the Mobile Node . . . to select a new secondary Home Agent to perform registration with in case the primary Home Agent fails." (Ton ¶ 0028). Another alternative to avoid Home Agent failure following mobile node registration, Ton calls for "a dedicated hot standby or shared redundancy Home Agent . . . ." (Ton ¶ 0028; Fig. 4 ("illustrating a flow of messages"); *see also* ¶ 0045 ("alternately using error code 136 . . . .")).

In other words, Ton recites activity **following registration**. After the MN is registered, and the primary Home Agent finds a less busy Home Agent, then it provides the MN with “an additional Mobile IP extension is added to the registration reply message.”

Similarly, Perkins, “*IP Mobility Support*,” relates to **post-initial registration attempt activity**, in which “protocol enhancements that allow transparent routing of IP datagrams to mobile nodes in the Internet. Each mobile node is always identified by its home address, regardless of its current point of attachment to the Internet. While situated away from its home, a mobile node is also associated with a care-of address which provides information about its current point of attachment to the Internet.” (Perkins, “*IP Mobility Support*, page 1 (Abstract)).

**C. Post-registration mobile IP extension of Ton and the home agent discovery of Perkins do not address failed initial registration that precludes network access, unlike Applicant's Claims 1-7 and 15-21**

In contrast, Applicant's Independent Claim 1 recites, *inter alia*, a “method for registering a subscriber unit upon initial use within a cellular system, the method comprising: initially programming addresses for a plurality of home agents in the subscriber unit *prior to an initial registration attempt with a primary home agent*, wherein the plurality of home agents includes the primary home agent and a plurality of secondary home agents; attempting the initial registration attempt with the primary home agent; when the subscriber unit fails to achieve registration via the initial registration attempt with the primary home agent of the plurality of home agents, selecting a secondary home agent from the plurality of secondary home agents; and attempting registration with the selected secondary home agent.”

Applicant's Independent Claim 15 recites, *inter alia*, a “subscriber unit that operates within a cellular system, the subscriber unit comprising: an antenna; a radio frequency unit coupled to the antenna; and at least one digital processor coupled to the radio frequency unit that executes software instructions causing the subscriber unit to: retrieve addresses, stored in the subscriber unit, for a plurality of home agents in the subscriber unit *for an initial registration attempt with a primary home agent*, wherein the stored address for the plurality of home agents includes a primary home agent and a plurality of secondary home agents *which have been initially stored prior to the initial registration attempt*; attempt the initial registration with the

primary home agent; *when failing to achieve registration* with the primary home agent *via the initial registration attempt*, selecting a secondary home agent from the plurality of secondary home agents; and attempt registration with the selected secondary home agent.”

Applicant respectfully submits that there is no suggestion or motivation to modify the post-registration redundancy device of Ton in view of the protocol enhancements of Perkins, “*IP Mobility Support*,” to achieve Applicant’s invention recited in the method of Independent Claim 1 or the subscriber unit of Independent Claim 15, much less teach or suggest all the claim limitations. Applicant respectfully submits that a *prima facie* case of obviousness has not been made out with respect to Claim 1 and Claims 2-7 that depend therefrom, and with respect to Claim 15 and Claims 16-21 that depend therefrom, by the hypothetical combination of Ton in view of Perkins, “*IP Mobility Support*,” and requests withdrawal of the rejection.

Further, Applicant respectfully submits that the hypothetical combination of the post-registration redundancy device of Ton in view of the protocol enhancements of Perkins, “*IP Mobility Support*,” does not result in all of Applicant’s claim limitations as set out in its Claim 1 and Claims 2-7 that depend therefrom, and as set out in its Claim 15 and Claims 16-21 that depend therefrom.

**D. Addition of further references to the hypothetical combination of Ton and Perkins do not overcome the lack of a *prima facie* showing of obviousness**

Claims 2 and 3 depend directly or indirectly from Independent Claim 1. Claims 16 and 17 depend directly or indirectly from Independent Claim 15. Because the hypothetical combination of Ton in view of Perkins, “*IP Mobility Support*,” does not substantiate a *prima facie* case of obviousness as to Claims 1 and 15, Applicant respectfully submits that a *prima facie* showing of obviousness is not substantiated through the addition of Troxel as to claims 2, 3, 10, 11, 16, and 17.

Troxel recites an “invention [that] can enable nodes on a foreign subnetwork to exchange messages.” (Troxel ¶ 0016). With foreign agents, Troxel allows rankings of foreign agents “based, for example, on services offered by the agents, capacity, signal strength, and so forth.” (Troxel ¶ 51).

In contrast, Applicant's Independent Claim 10 recites a "method for registering a subscriber unit upon initial use within a cellular system, the method comprising: initially programming addresses for a plurality of home agents in the subscriber unit prior to an initial registration attempt with a primary home agent, wherein the plurality of home agents includes the primary home agent and a plurality of secondary home agents; attempting the initial registration attempt with the primary home agent; when the subscriber unit fails to achieve registration via the initial registration attempt with the primary home agent of the plurality of home agents, selecting a first secondary home agent from the plurality of secondary home agents based upon a rank ordering of the plurality of secondary home agents; and attempting registration with the selected secondary home agent."

Applicant respectfully submits that there is no suggestion or motivation for the hypothetical combination of Ton and Perkins that would arrive at Applicant's claimed invention. to modify the post-registration redundancy device of Ton in view of the registration discovery of Perkins, "*IP Mobility Support*," and further in view of the foreign agent ("FA") ranking device of Troxel, to achieve Applicant's invention recited in the method of Independent Claim 10, much less teach or suggest all the claim limitations. Applicant respectfully submits that a *prima facie* case of obviousness has not been made out with respect to Claims 2 and 3, which depend directly or indirectly from Independent Claim 1, Claims 10 and 11 that depend therefrom, and Claims 16 and 17 that depend directly or indirectly from Independent Claim 15, by the hypothetical combination of Ton in view of Perkins, "*IP Mobility Support*," in further view of Troxel and requests withdrawal of the rejection.

These remaining rejections of the claims that depend from Applicant's Independent Claims are respectfully traversed in that, as shown below, there is no suggestion or motivation (Kevin – As I'm sure you know, KSR does not require that there be a suggestion or motivation to combine in the references themselves. Therefore, I suggest you argue that even if, hypothetically, one were to combine Ton and Perkins, one would still not arrive at the Applicant's claimed invention.) to modify the post-registration redundancy device of Ton in view of the protocol enhancements of Perkins, "*IP Mobility Support*," to achieve Applicant's invention of its Independent Claims 1 and 15, and further in view of the foreign agent ranking device of Troxel

with regard to Independent Claim 10, to achieve Applicant's claimed invention. Further, it is respectfully submitted that in several instances, much less teach or suggest all of Applicant's claim limitations. Applicant respectfully submits that its disclosure was improperly used as a blue print to bring disparate references to form an improper basis for rejection of Applicant's claimed invention.

Jue recites "[m]obility supporting IP networks [that] requires servers to forward packets to mobile hosts and to maintain information pertaining to a mobile host's location in the network." (Jue, Abstract). That is, post-registration activities.

Tiedmann relates to a cellular telephone "system for increasing the reliability of the cellular telephone system in environments having substantial multipath propagation or under conditions wherein a large number of mobile telephone units simultaneously attempt to access a base station." (Tiedmann 1:18-24). Specifically, Tiedmann relates to "[reducing] interference between multiple spread-spectrum transmitters operating simultaneously . . . ." (Tiedmann 3:12-15). Tiedmann appears to be completely unrelated to Applicant's invention.

Perkins II recites that "Mobile IP requires the existence of a network node known as the home agent. Whenever the mobile node is not attached to its home network (and is therefore attached to what is termed a foreign network), the home agent gets all the packets destined for the mobile node and arranges to deliver them to the mobile node's current point of attachment." (Perkins, "*Mobile Networking through Mobile IP*," at p. 59). That is, Perkins does not address home agent inoperability.

Fehnel recites "an object . . . to provide methods and systems for generating a current time of day in a cellular radiotelephone. (Fehnel 2:20-22).

Claims 4-6 depend directly or indirectly from Independent Claim 1. Claims 12-14 depend directly or indirectly from Independent Claim 10. Claims 18-10 depend directly or indirectly from Independent Claim 15. Because Ton in view of Perkins, "*IP Mobility Support*," does not provide a *prima facie* case of obviousness with respect to Independent Claims 1 and 15, the addition of supplemental references, as respectfully submitted, does not cure the deficiency of the lack of a *prima facie* showing of obviousness as to the claims that depend from these

independent claims. Accordingly, Applicant respectfully requests that the rejection of these claims be withdrawn.

Claims 12-14 depend directly or indirectly from Independent Claim 10. Because Ton, in view of Perkins, “*IP Mobility Support*,” in further view of Troxel does not provide a *prima facie* showing of obviousness with respect to Independent Claim 10, the addition of supplemental references, as respectfully submitted, does not cure the deficiency of the lack of *prima facie* case of obviousness as to the claims that dependent from Independent Claim 10. Accordingly, Applicant respectfully requests that the rejection of these claims be withdrawn.

Generally, Ton does not provide a basis for establishing a *prima facie* obviousness rejection. Under Ton, Home Agent registration failure is avoided by appending “an additional Mobile IP extension [that] is added to the registration reply message [that allows] the Mobile Node . . . to select a new secondary Home Agent to perform registration with in case the primary Home Agent fails.” (Ton ¶ 0028). As another alternative to avoid Home Agent registration failure, Ton calls for “a dedicated hot standby or shared redundancy Home Agent . . . .” (Ton ¶ 0028).

Accordingly, Applicant respectfully submits that the hypothetical combination of the post-registration redundancy device of Ton in view of the protocol enhancements of Perkins, “*IP Mobility Support*, or the various references further cited, would not achieve Applicant’s claimed invention of dependent Claims 4-6, which depend directly or indirectly from Independent Claim 1, dependent Claims 12-14, which depend directly or indirectly from Claim 10, and dependent Claims 18-20, which depend directly or indirectly from Independent Claim 15.

Applicant respectfully submits that the cited references do not teach or suggest all of Applicant’s limitations as set out in its claims, as shown in the above discussion.

**2. Conclusion**

As a result of the foregoing, the Applicant respectfully submits that Claims 1-7 and 10-21 in the Application are in condition for allowance, and respectfully requests an allowance of such Claims.

If any issues arise, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at [ksmith@texaspatents.com](mailto:ksmith@texaspatents.com).

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Garlick Harrison & Markison Deposit Account No. 50-2126.

Respectfully submitted,

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